



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,634	01/27/2004	Robert W. Helt	TIR 2748, 2837	2260

7590 04/12/2007
MICHAEL E. MARTIN
THE TRANE COMPANY
PATENT DEPT. 12-1
3600 PAMMEL CREEK ROAD
LA CROSSE, WI 54601

EXAMINER

BANKHEAD, GENE LOUIS

ART UNIT	PAPER NUMBER
----------	--------------

3744

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/765,634	HELT ET AL.	
	Examiner	Art Unit	
	Gene L. Bankhead	3744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01/08/07.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 23-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-11, 20-22 and 26-28 is/are rejected.
- 7) ☒ Claim(s) 4 and 12-19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01/27/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/27/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments, filed 01/08/2007, with respect to the rejection(s) of claim(s) 1,3,5-11,20-22 and 26-28 under 35 U.S.C. 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Dushane and Parker et al. (US 4843084).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dushane (US 5348078) in view of Parker et al. (US 5181653).

Regarding claim 1 Dushane discloses an air conditioning system 26 with multiple thermostats 50; each including a temperature display 100 and switch actuators (column 9 lines 58-68 and Figure 11a) capable of setting temperature set points. Dushane however fails to teach control circuits in communication with one another such that changing the temperature of any one of the multiple thermostats changes the temperature of all the thermostats. Parker et al. teach a thermostat control system with multiple thermostats 10 wherein each thermostat can function as a master thermostat,

and control the temperature of each of the other thermostats (column 1 lines 40-50). It would have been obvious to modify the thermostats of Dushane with the air conditioning system of Parker et al. in order to maintain a constant and steady temperature throughout commonly used closed spaces, such as office buildings, houses, etc. This is especially important during the winter months when heat costs can be excessive due to large fluctuations in temperature between the ground floor and upstairs levels.

In regards to claim 2 Dushane discloses that each of the multiple thermostats include a radio frequency transmitter 344 (column 11 lines 7-22) and communicate with each other via radio frequency transmission (column 11 lines 7-22 and column 14 lines 7-21).

Regarding claims 3 and 5 Dushane discloses a thermostat with a master controller 70 corresponding to the claimed "control here" switch actuator (Figure 12a) that affects the control of the air conditioning unit to control the temperature in accordance with the temperature set point (column 11 lines 25-35). Though Dushane does not teach each thermostat has a "control here" switch controller it would have been obvious to modify Dushane such that each of the thermostats included a control here switch in order to notify users each thermostat is capable of changing the temperature in every building location in view of the teachings of Parker et al.

With regard to claim 6, Dushane further discloses a clock 144 and a visual display of time (Figure 12a). Dushane further teaches switch actuators capable of setting a time displayed by one of said thermostats to effect a change in the time displayed by each of the thermostats (column 9 lines 58-68). Parker et al. teach a

display 14 (Figure 1) of each thermostat capable of showing the temperature as measured in each location of the building. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dushane with Parker et al. for a user to advantageously know the temperature at any location throughout the building for all rooms.

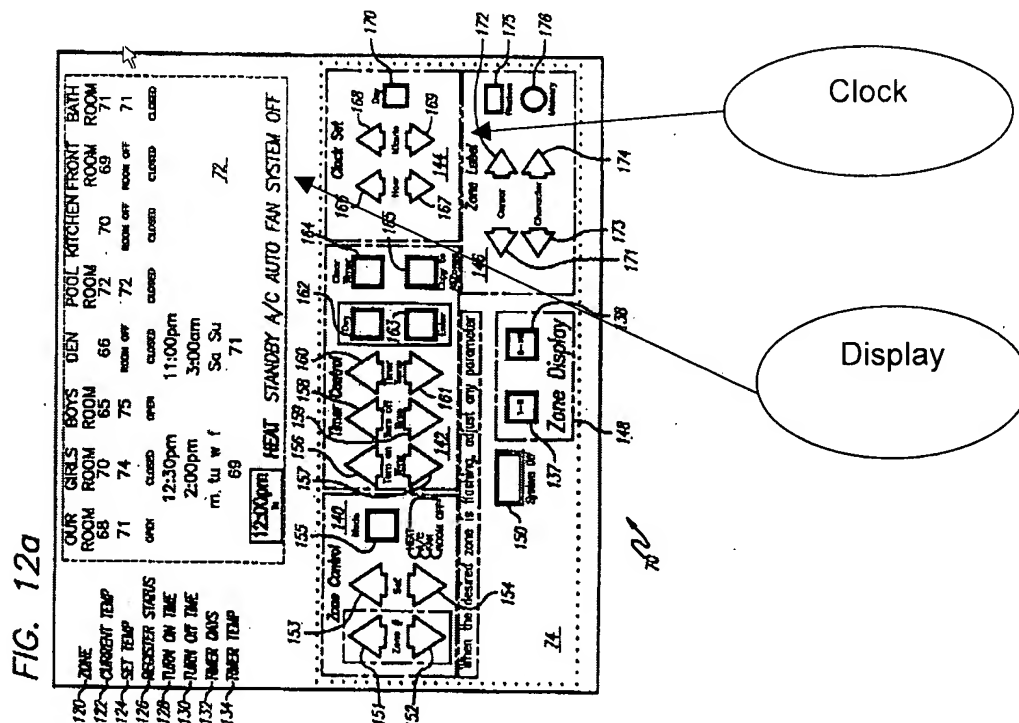


Figure 12a (Dushane)

Regarding claim 7 Dushane discloses multiple thermostats with at least one including a time display, a Daylight Savings Time icon, and a Daylight Savings Time switch actuator capable of adjusting the time during Daylight Savings time periods (Figure 12a and column 11 lines 33-35).

In regard to claim 8 Dushane's central controller (column 13 lines 8-23) is configured to receive signals of the temperature sensed from the other thermostats and control the other thermostats based on the temperature sensed (column 13 lines 35-68 and column 14 lines 1-22).

Regarding claims 9 and 10, see the rejections of claims 5 and 6 as the claims cite similar subject matter.

Regarding claim 11, Dushane discloses an air conditioning system capable of performing the method of controlling the operation of an air conditioning system by sensing temperatures in enclosed spaces 42 and communicating the sensed temperatures between thermostats. Dushane further teaches a system with all physical features of the method as claimed, see the rejection of claim 1.

With regard to claim 20, Dushane further teaches switch actuators capable of setting a time displayed by one of said thermostats to effect a change in the time displayed by each of the thermostats (column 9 lines 58-68).

Regarding claim 21, Dushane in view of Parker et al. teach an air conditioning system capable of performing the method of claim 21 as cited, see the rejection of claim 1 as claims cite similar subject matter. Dushane further discloses a thermostat with a master controller 70 corresponding to the claimed "Control Here" switch as well as capable of actuating the "Control Here" switch to cause the entire system to satisfy a setpoint of the one thermostat (column 11 lines 25-35).

With regard to claim 22, Dushane discloses thermostats including a clock, a time display and a clock setting switch actuator (Figure 12 a) and capable of setting the clock at one of the thermostats to display the time at all the thermostats.

Allowable Subject Matter

Claims 4, 11-19, and 26-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gene L. Bankhead whose telephone number is (571)-272-8963. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on (571)-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3744

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


CHERYL TYLER
SUPERVISORY PATENT EXAMINER

Gene Bankhead
Examiner
Art Unit 3744